

DOCKET NO. 3610-10-1

What is claimed is:

1. A silicone oil emulsion stabilized with soap, wherein the soap includes:
one or more fatty acid carboxylates having from 8 to 18 carbon atoms; and a
cation of a base, the soap being formed in situ from the fatty acid and the base during formation
of the emulsion.
2. A silicone oil emulsion according to claim 1 including from 2 to 70% by weight
of a silicone oil.
3. A silicone oil emulsion according to claim 2 wherein the soap is present in an
amount of from 2 to 30% by weight.
4. A silicone oil emulsion according to claim 3 wherein the fatty acid carboxylates
have a similar distribution to that found in an oil selected from the group consisting of vegetable
oils and coconut oil.
5. A silicone oil emulsion according to claim 1 wherein the fatty acid is derived from
coconut oil.
6. A silicone oil emulsion according to claim 1 wherein the base is a trialkanolamino
species.
7. A silicone oil emulsion according to claim 1 wherein the base is triethanolamine.
8. A silicone oil emulsion according to claim 1 wherein the base is NaOH or KOH.

DOCKET NO. 3610-10-1

9. A silicone oil emulsion according to claim 1 wherein the silicone oil is selected from the group consisting of polydimethylsiloxane oil and polymethylphenylsiloxane oil.

10. A silicone oil emulsion according to claim 1 wherein the silicone is end-capped with a hydroxy or trimethylsilyl group.

11. A silicone oil emulsion according to claim 1 wherein the silicone oil is functionalized.

12. A silicone oil emulsion according to claim 1 wherein the silicone oil contains a carboxylic group.

13. A silicone oil emulsion according to claim 1 wherein the silicone oil contains a halo group.

14. A silicone oil emulsion according to claim 1 wherein the silicone oil has a viscosity below 1,000,000 cps.

15. A silicone oil emulsion according to claim 14 wherein the silicone oil has a viscosity below 100,000 cps.

16. A silicone oil emulsion according to claim 1 wherein in the emulsion the mean particle size is less than 1.0 micrometers.

17. A silicone oil emulsion according to claim 16 wherein in the emulsion the mean particle size is less than 0.5 micrometers.

DOCKET NO. 3610-10-1

18. A silicone oil emulsion according to claim 17 wherein in the emulsion the mean particle size is between 0.25 and 0.4 micrometers.

19. A silicone oil emulsion according to claim 1 wherein in the emulsion at least 90% of the particles in the emulsion are less than 0.6 micrometers in size.

20. A silicone oil emulsion according to claim 1 further including a biocide.

2020-09-01